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APPLICATION NO.	FII	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,997 02/02/2004		Claus Riehle	PO-8010/LeA 36,342	2148	
157	7590	10/18/2006		EXAMINER	
BAYER M	ATERIAI	L SCIENCE LLC	SUNG, CHRISTINE		
100 BAYER PITTSBURG		5205	ART UNIT	PAPER NUMBER	
11113000	JII, I A I		•	2884	

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	n No.	Applicant(s)					
		10/769,99	7	RIEHLE ET AL.					
	Office Action Summary	Examiner		Art Unit					
		Christine S	Sung	2884					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status									
2a) ☐ 3) ☐	Responsive to communication(s) filed on <u>08 August 2006</u> .  This action is <b>FINAL</b> . 2b) This action is non-final.  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
<ul> <li>4)  Claim(s) 1-24 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-24 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>									
Application	on Papers								
10) 🖾 -	The specification is objected to by the Ext The drawing(s) filed on <u>02 February 2004</u> Applicant may not request that any objection Replacement drawing sheet(s) including the of The oath or declaration is objected to by	! is/are: a)⊠ acc to the drawing(s) b correction is requir	e held in abeyance. See ed if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).					
Priority u	nder 35 U.S.C. § 119								
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.									
2) Notic 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-9 nation Disclosure Statement(s) (PTO-1449 or PTO/ r No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:						

#### Response to Amendment

1. The amendment filed on August 8, 2006 has been accepted and entered.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being obvious over Meeuwssen (US Pre Grant Publication 2004/0249512 A1).

The applied reference has a common assignee and a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by:

(1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which

U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claim 1, Meeuwssen discloses a process for monitoring and/or controlling at least one nitration process (claim 1 and paragraph [0002]) comprising:

- a) measuring spectrometrically an online composition of an component of a nitration reaction mixture (paragraph [0011]),
- b) relaying data from a) to a process control system in order to monitor and control the production process (paragraph [0012] and [0014]).

Meeuwssen does not explicitly state that the component is an acid phase element of the nitration process, it would be obvious to one having ordinary skill in the art to adapt the general nitration monitoring as disclosed by Meeuwssen with the particular acid phase element, dependent upon the type of nitration process being monitored.

Regarding claims 2-3 Meeuwssen discloses using an NIR spectrometer (claim 5).

Regarding 4, Meeuwssen discloses a measuring cell for spectrometric measurement (Figure 1a, element 29).

Regarding claims 5-6, Meeuwssen discloses that the data are based on the spectrometric online measurement and evaluation with a matrix specific calibration model (paragraph [0026]).

Regarding claim 7, Meeuwssen discloses that a first supply of component is monitored and controlled after spectrometric examination (figure 1a, element 30) and a second supply of component is monitored and controlled after spectrometric examiner (Figure 1a, element 23).

Regarding claims 8-9, Meeuwssen discloses that the spectrometer is connected to several measuring points and is operated in multiplex mode in one nitration unit (paragraph [0001]).

Regarding claim 10, Meeuwssen discloses a product capable of automatically implementing the steps of:

- a) evaluating data obtained by a spectrometric examination of an component after nitration to determine the content of the component (paragraph [0011]), and
- b) relaying the component content from a) to a regulator to control metering of the component to a nitration reaction mixture (paragraph [0012] and [0014]).

Meeuwssen does not explicitly state that the component is an acid phase element of the nitration process, it would be obvious to one having ordinary skill in the art to adapt the general nitration monitoring as disclosed by Meeuwssen with the particular acid phase element, dependent upon the type of nitration process being monitored.

Regarding claim 11, Meeuwssen discloses having a matrix-specific calibration model for evaluating the nitric acid content (paragraph [0026]).

Regarding claim 12, Meeuwssen discloses that the product is designed for automated regulation (paragraph [0026]).

Regarding claim 13, Meeuwssen discloses a facility for monitoring and/or controlling a nitrating process comprising:

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a) means for spectrometric examination of an acid phase after a nitration (paragraph [0011]),

b) regulating means for metering component into at least one nitrating reactor, the regulating means being designed to regulate metering of nitric acid on the basis of the spectrometric examination (paragraph [0012] and [0014]).

Regarding claims 14-15, Meeuwssen discloses that the spectrometric examination comprising an NIR spectrometer (claim 5).

Regarding claim 16, Meeuwssen discloses a measuring cell for spectrometric measurement (Figure 1a, element 29).

Regarding claim 17, Meeuwssen discloses that the data are based on the spectrometric online measurement and evaluation with a matrix specific calibration model (paragraph [0026]).

Regarding claims 18 and 21-22, Meeuwssen discloses that the spectrometric measurement comprises an IR spectrometer (claim 5) with electronic evaluating unit (element 6), and the IR spectrometer is connected to several measuring points for spectrometric examination of the acid phase after nitration and IR spectrometer is designed for multiplex operation (paragraph [0001]).

Regarding claims 19 and 23-24 Meeuwssen discloses having a process control system (element 28) for the regulating means and a connection of the means for spectrometric examination to the process control system (element 3 is connected to element 28).

Regarding claim 20, Meeuwssen discloses that the data are based on the spectrometric online measurement and evaluation with a matrix specific calibration model (paragraph [0026]).

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### Response to Arguments

5. Applicant's arguments, filed August 8, 2006 with respect to the rejection(s) of claim(s) 1-24 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Meeuwssen.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Sung whose telephone number is 571-272-2448. The examiner can normally be reached on Monday- Friday 9-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christine Sung

Examiner

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PRIMARY EXAMINER